REQUEST FOR FUNDING PREAUTHORIZATION FOR THE HAZARDOUS SUBSTANCE RESPONSE TRUST FUND BY SPOKANE COUNTY FOR THE COLBERT LANDFILL REMEDIAL ACTION

Prepared for

Environmental Protection Agency

Prepared by

Spokane County

September 12, 1988





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PUBLIC WORKS DEPARTMENT

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September 9, 1988

Office of Emergency and Remedial Response

MIS: WH-548

U.S. Environmental Protection Agency

401 "M" Street S.W.

Washington, D.C. 20460

Attention: Mr. Henry L. Longest, II, Director

RE: Colbert Laudfill

Request for Preauthorization

Gentlemen:

Spokane County is filing this request for preauthorization for cost recovery related to the Colbert Landfill remedial action in Spokane County, Washington. The County would like to thank Mr. Bill Ross of your Washington, D.C., office for his guidance during preparation of this request.

Spokane County's request for preauthorization (for mixed funding) is for \$1,400,000, or approximately 10 percent of the estimated cost of remediation for the Colbert Landfill Superfund site. To date, a Consent Decree (Appendix B) has been agreed to in principle. This draft Consent Decree includes a Scope of Work (Appendix C), which provides a detailed framework for implementation of the remedial action based on the EPA-selected remedy (as described in the Record of Decision [Appendix A]). The Consent Decree will be lodged following approval of Spokane County's request for preauthorization.

Spokane County intends to implement the Colbert Landfill remedial action using a design consultant and a contractor for project design and construction, respectively. As documented herein, the consultant and contractor selection process will be free and open, and will be structured such that the selected firms will have the capability, knowledge and understanding to successfully complete the remedial action. Spokane County has managed a number of large construction

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projects, including some larger than the Colbert Landfill remediation, and intends on utilizing this management expertise during implementation of the remedial action.

We trust that you will find this request for preauthorization complete. However, please advise us if you have any additional information requirements.

Very truly yours,

Dennis M. Scott, P.E. Director of Public Works

DMS:sla/0203o Attachments

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REQUEST FOR FUNDING PREAUTHORIZATION FOR THE HAZARDOUS SUBSTANCE RESPONSE TRUST FUND BY SPOKANE COUNTY FOR THE COLBERT LANDFILL REMEDIAL ACTION

Section 111(a)(2) and 122(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), authorizes the Hazardous Substance Response Trust Fund (Fund) to reimburse potentially responsible parties (PRPs) for costs incurred as a result of carrying out the National Contingency Plan (NCP). In order to qualify for reimbursement, the requesting party must seek and obtain prior approval (preauthorization) from the Environmental Protection Agency (EPA) administrator for the proposed remedial action. Spokane County is a PRP eligible under Section 111(a)(2) of the CERCLA, 42 U.S.C. 9611(a)(2), for reimbursement of "necessary response costs incurred...as a result of carrying out the National Contingency Plan." To fulfill the requirements for reimbursement, Spokane County is filing this request for preauthorization for cost recovery from the Fund related to the Colbert Landfill remedia-This request is for \$1,400,000, which represents approxition. mately 10 percent of estimated design, construction, and startup costs for this action. This amount has been mutually agreed upon between EPA and Spokane County, and is intended to cover the remediation costs of the non-settling PRPs.

INTRODUCTION AND SITE DESCRIPTION

The Colbert Landfill is an inactive sanitary landfill located in northeastern Washington approximately 15 miles north-northeast of the City of Spokane. Situated in the southeast corner of

section 3, Township 27 North, Range 43 East, W.M., the landfill covers 40 acres. It is about two and one-half miles north of the Town of Colbert and one-half mile east of U.S. Highway 2 (Newport Highway) in the northwestern quadrant of the intersection of Elk-Chattaroy, Yale, and Big Meadows Roads. Owned and operated by spokane County (The County), the Colbert Landfill opened in 1968 and received both municipal and commercial wastes until 1986. The landfill is now filled to capacity and is no longer receiving wastes.

The remedial action site, the area of potential impact surrounding and including the landfill, extends north of the landfill about one-half mile, west about one mile to the Little Spokane River, east a similar distance, and south approximately five miles to Peone Creek (also known as Deadman Creek). total remedial action area is approximately 6800 acres and includes parts of Sections 2, 3, 10, 11, 14, 15, 16, 21, 22, 23, 26, 27, 28, 33, 34, and 35 in T 27 N, R 43 E. The site is located on a plateau bounded by steep bluffs on the west and low granite and basalt hills to the east. Surface drainage is west to the Little Spokane River. The climate is characteristic of eastern Washington, with temperatures ranging from typical average summer highs of about 83° F to average winter lows of around 23° F. The relatively low annual precipitation of approximately 17 inches falls mainly during the winter months of November through February (NOAA 1985).

The geology of the site consists of a series of glacially-derived materials deposited on an eroded landscape of clays, basaltic lava flows, and granitic bedrock. The stratigraphic

units (layers) as described in the Remedial Investigation (RI) (Golder Associates, Inc., 1987), from youngest to oldest (i.e., from the top down), are:

- Unit A. Glacial outwash/Missoula flood sands/gravels;
- Unit B. Glacial Lake Columbia lacustrine silts/clays;
- Unit C. Older glaciofluvial and/or alluvial sands/gravels;
- Unit D. Weathered basalts and Latah (landslide deposits);
- Unit E. Unweathered Latah silts/clays;
- Unit F. Granite bedrock.

This specific geologic system can be hydrogeologically defined as containing three aquifers and three aquitards. is an aquifer associated with Unit A, the glacial outwash/ Missoula flood deposits, which is designated as the upper sand/ gravel aquifer. Unit B, the lacustrine silts/clays stratum, is a relatively impermeable layer which acts as an aquitard. second aquifer, located in Unit C, the older glaciofluvial and/or alluvial deposits, is called the lower sand/gravel aquifer. weathered zone of the basalts and Latah, Unit D, may be considered an extension of the lower aquifer. The unweathered Latah silts/clays, Unit E, serves as the second aquitard. The upper fractured zone of the granite, Unit F, is capable of water transmission and, although a poor producer in most areas, it could be considered as an aquifer while the deeper, less fractured portions of the bedrock serve as the confining lower boundary or aguitard to the entire regional flow system.

The upper aquifer is unconfined with a water table at an approximate elevation of 1,770 feet (MSL), 90 feet below ground

surface in the area of the landfill. The thickness of the upper aquifer varies from about 8 to 15 feet along its north-south trending centerline, decreasing as it extends toward the western bluffs and eastern hills. Ground water flows predominately toward the south with velocities ranging from 4 to 13 feet per day (ft/day). The lower aquifer is generally a confined system, with its potentiometric surface at an approximate elevation of 1,680 feet (MSL), 180 feet below ground surface in the area of the landfill. The thickness of the lower aquifer varies considerably from only a few feet thick east of the landfill, to over 150 feet thick as it approaches the Little Spokane River valley where the aquifer is hydraulically connected with the river. Ground water in this lower sand/gravel aquifer flows predominantly toward the west at velocities ranging from 2 to 12 ft/day. Northeast of the landfill, the upper aquitard is not present and the lower aquifer is closer to the surface, interconnecting with the upper aquifer.

The Colbert Landfill was operated as a sanitary landfill by the Spokane County Utilities Department. It was opened in September 1968 and operations ceased in October 1986. During the five years from 1975 to 1980, a local electronics manufacturing company, Key Tronic Corporation (Key Tronic), used the Colbert Landfill to dispose of spent organic solvents, mainly methylene chloride (MC) and 1,1,1-trichloroethane (TCA), at an average rate of several hundred gallons a month (See Appendix A: ROD, Table 1, for approximate disposal volumes). These wastes were typically brought to the landfill in drums which were

emptied into open trenches to mix with the soil or municipal refuse already in the trench. A nearby military facility, Fairchild Air Force Base, also disposed of various solvent wastes at the site. Hazardous substances detected in the ground water at the site were also disposed of by a number of other parties, including Alumax Irrigation Products, A&M Manufacturing, and United Paint, Inc. A variety of other chemicals (such as pesticides and refinery tar residues) from other sources were also disposed at the site but have not, to date, been detected in the ground water at the site.

In 1980, nearby residents complained to the Eastern Regional Office of the Washington Department of Ecology (Ecology) about disposal practices at the landfill. State and county officials, under the lead of the Spokane County Utilities Department, initiated an investigation into complaints of ground water contamination in the area by sampling nearby private wells. The results of this initial investigation indicated that some of these wells were contaminated with TCA.

Since 1980, additional studies have been directed toward the contamination problem at the Colbert Landfill. The first study (Maddox 1981), initiated in response to citizen complaints, included a review of existing information on the site and some field study, and recommended a ground water monitoring program. Further studies, conducted in 1982 (Maddox 1982), involved monitoring well installation, injection tests, and two rounds of ground water quality sampling and analysis. This study included sampling of selected private and purveyor wells.

In August 1983, the EPA placed the Colbert Landfill site on its National Priorities List (NPL). CH2M Hill was then contracted by EPA to develop a Remedial Action Master Plan (CH2M Hill 1983). This plan presented a scope of work for the eventual Remedial Investigation/Feasibility Study (RI/FS). During this period, the County and Key Tronic continued sampling and analysis of well waters around the landfill (Spokane County and Key Tronic 1986).

by the County and Key Tronic to those households with high contamination levels in their wells. Ecology entered into a cooperative agreement with the EPA for conducting a RI/FS at the Colbert Landfill site in August 1984. A "Focused Feasibility Study for Initial Remedial Measures at the Colbert Landfill" (Ecology 1984a) was conducted and a "Community Relations Plan for Remedial Measures at the Colbert Landfill" (Ecology 1984b) was initiated in June 1984. The chosen Initial Remedial Measure (IRM) was to supply water to the affected area by constructing a pressurized water system through the Colbert Extension (System 9) of the Whitworth Water District No. 2. Hook-up of affected residents to this system was subsidized by two of the PRPs (the County and Key Tronic), contingent on three conditions:

- Well water contamination of more than 200 micrograms per liter TCA;
- o Proximity (less than 500 feet) to water supply mains; and
- o Execution of a hold-harmless agreement.

Other residents not meeting these conditions have also elected to receive this water at their own expense.

Ecology contracted Golder Associates, Inc. (Golder) to conduct a data review of the Colbert Landfill site. A recommendation report was submitted in December 1984 (Golder Associates, Inc.1984), and a work plan for the Remedial Investigation (RI) was submitted in January 1985. Authorization to conduct the RI was received in March 1985. A draft RI report was released for public review in May 1986 and the final RI report was completed in May 1987 (Golder Associates, Inc. 1987).

The primary contaminants detected in the ground water at the Colbert Landfill site during the RI were six volatile organic chemicals, all chlorinated aliphatic hydrocarbons (Golder Associates, Inc. 1987). These contaminants are listed in Table 1. Several other contaminants were also detected in the RI samples, but occurred at lower concentrations or were less widely distributed (see Table 1). Because they behaved similarly to the primary contaminants, they were not considered separately for remediation. Although the contaminants placed into the landfill traversed a considerable thickness of unsaturated soil to reach the ground water, only trace concentrations of these chemicals were found in soil samples obtained from the landfill during the RI drilling program.

In April 1986, Ecology authorized Golder to prepare a feasibility study (FS) based upon the RI. The FS was performed by Golder and a subcontractor, Envirosphere Company, with input from Hall and Associates. The FS Final Report was submitted for public comment in May 1987 (Golder and Envirosphere 1987).

TABLE 1

ORGANIC CONTAMINANTS FOUND IN COLBERT LANDFILL SITE GROUND WATER DURING REMEDIAL INVESTIGATION

| Contaminant | Number of Wells | Maximum Concentration (ug/l)* |
|---|--------------------|-------------------------------|
| Major Contaminants | | |
| 1,1,1-Trichloroethane (TCA) | 20 | 5,600 |
| 1,1-Dichloroethylene (DCE) | 19 | 190 |
| 1,1-Dichloroethane (DCA) | 19 | 600 |
| Trichloroethylene (TCE) | 11 | 230 |
| Tetrachloroethylene (PCE) | 9 | 23 |
| Methylene Chloride (MC) (also called Dichloromethane) | 11 | 2,500 |
| Lesser Contaminants | | |
| Acetone (also called Propanone) | 3 | 445 |
| <pre>Chloroform (also called Trichloro- methane)</pre> | 11 | 6 |
| Methyl Ethyl Ketone (also called 2-Butanone) | 2 | 14 |
| <pre>1,2-Dichloroethane (also called Ethylene Dichloride)</pre> | 2 | 5 |
| 1,2-trans-Dichloroethylene | 5 | 12 |
| Toluene (also called Methyl Benzene) | 2 | <1 |

^{*} In this report, all organic contaminant concentrations will be presented in units of micrograms (ug) of chemical per liter (1) of water. This conventional unit of measurement is essentially equivalent to parts per billion (ppb).

prior to design and construction of the final remedial action, additional site characterization will be required (termed phase I in the Draft Consent Decree Scope of Work [Landau Associates, Inc. 1988]). Consequently, it will not be possible to describe in detail some aspects of the remedial action requested in the preauthorization guidance document (EPA 1988). However, the Draft Consent Decree Scope of Work (Scope of Work) provides a detailed framework for the remedial action and documents the review and approval authority of the EPA for aspects of remedial action not addressed within the RI/FS or the ROD. The ROD and the Scope of Work are included as Appendices A and C, respectively. Due to its size, a copy of the RI/FS is not included.

The County intends to implement the remedial action utilizing a design consultant and a contractor for design and construction, respectively; but will provide project management services internally. As will be described in greater detail in subsequent sections of this text, the design consultant and the contractor will be chosen using (separate) selection processes that provide maximum open and free competition; and that insure the selected party has the capability, knowledge, and understanding to fulfill their respective roles in completing the remedial action.

One of the primary functions of the County is to provide services, such as roadways and sewers. As such, the County has demonstrated the ability on numerous occasions to manage large construction projects, including some projects costing more than that estimated for the Colbert Landfill remediation. However, since these projects have not been related to contamination

remediation, the selected design consultant will be required to have a demonstrated knowledge and understanding of CERCLA, and will be expected to facilitate remedial activities in accordance with CERCLA requirements.

CONSENT DECREE AND NATURE OF SETTLEMENT

parties. Four of these parties were ultimately identified as PRPs. These include: the County, Key Tronic, the United States Department of Defense (the Air Force), and Alumax. A consent decree has been agreed to in principle between the Governments (EPA and Ecology), the County, and Key Tronic in July 1988. The Air Force has also settled with the Governments, the terms of which are embodied within a separate Consent Decree. Alumax has not agreed to execute the Consent Decree.

Key Tronic and the County have proposed a settlement in which the County will perform the remedy selected by EPA, as specified in the Scope of Work, and Key Tronic will pay the amount of \$4,200,000 into a trust fund for remediation of the Colbert Landfill site (Trust Fund). Key Tronic's payments will be made under the schedule contained in Section VIII of the Consent Decree. The Air Force has agreed to pay \$1,450,000 toward the remedial action. The County will contribute the remainder of the monies required to accomplish the remedial action (including EPA mixed funding, and State mixed funding and grants specified within the scope of work).

EPA has indicated an intent to cost-recover against non-settling PRPs if they (the PRPs) do not ultimately execute the Draft Colbert Landfill Consent Decree (Consent Decree).

Ecology has agreed to assist the County by contributing \$660,000, which includes previously incurred Ecology expenses and claims against the Washington State Toxics Control Account under Chapter 70.105B (Washington Administrative Code). The County will also be eligible to apply for and may receive an unspecified amount of future State grant monies and State mixed funding.

The Consent Decree specifies that the remedy will be implemented by the County.

In accordance with the Consent Decree, the County seeks reimbursement for \$1,400,000 from the Fund. The various funding sources for remediation of the Colbert Landfill site are presented in Table 2.

TABLE 2
FUNDING SOURCES FOR REMEDIATION
OF THE COLBERT LANDFILL SITE

| Source | Amount |
|---------------------|-------------|
| | |
| Key Tronic | \$4,200,000 |
| U.S. Air Force | 1,450,000 |
| State of Washington | 660,000 |
| | 1,400,000 |
| E.P.A. | |
| Snokane County | 6,290,000* |

^{*} Based on an estimated total remediation cost of \$14,000,000

The consent decree (attached hereto as Appendix B) will be lodged with the United States District Court, District of Eastern

washington. After the Consent Decree has been approved and entered by the Court, the County will be obligated to carry out its terms and to implement the remedy selected by EPA in its Record of Decision (ROD; EPA 1987) and specified in the Scope of Work. Moreover, the County fully intends to undertake and complete the clean-up of this site in a timely manner.

REMEDY

Background

Spokane County proposes to implement a performance-based pump, treat, and discharge approach for remediation of contaminated ground water emanating from the Colbert Landfill site. This is the remedy selected by the EPA in the ROD and specified in the Scope of Work. As discussed in the ROD, a number of treatment options are acceptable, provided the selected option meets an EPA approved performance criteria, as specified in the Scope of Work. Spokane County is proposing to implement the EPA-selected option, using air stripping for treatment. The pump and treat remedy is designed to:

- o prevent further spread of contaminated ground water (in the south and west) in two aquifers by installing and operating interception wells;
- o remove contaminated materials (in the east) which have entered the aquifers and are contributing to the contamination plume, by installing and operating extraction wells in the area where the plumes originate;

- o reduce the toxicity, mobility, and volume of the contaminants by treating all extracted ground water from both interception and extraction wells; and
- o provide an alternate water supply system to any residents deprived of their domestic supply due to demonstrated contamination from the landfill or due to the action of the extraction or interception systems.

The selected remedy is based on the RI/FS, which examined several remedial options including:

- o no action;
- alternate water supply;
- o point of entry treatment; and
- o ground water extraction, treatment, and discharge (using various technologies for each), plus an expanded water system.

Each of these alternatives was considered separately in three geographic portions of the site:

- o the south area, where a contaminant plume is advancing to the south in the upper aquifer;
- o the west area, where a contaminant plume in the lower aguifer is the major concern; and
- o the east area, where the plumes appear to originate.

About 90 different technologies were screened and evaluated during the feasibility study. As a result of this analysis, 26 remedial alternatives were carried through a detailed evaluation using the EPA's 1985 RI/FS factors (EPA 1985): 12 for the south area, and 7 each for the west and east areas.

Selected Remedy

The remedy selected by the EPA in the ROD, as specified in the Scope of Work, includes the following components:

- o in the south area, a series of extraction wells will be installed at the southern (downgradient) edge of the contaminant plume to intercept the contaminant plume in the upper aquifer;
- o in the west area, a series of extraction wells will be installed to minimize future westward migration of contamination in the lower aquifer; and
- o in the east area, where the plume originates, extraction wells will be installed for contaminant source control in the lower aquifer.

Contaminated ground water will be extracted using deep wells. All three systems will be designed to treat extracted water to the Scope of Work specified performance standards employing air stripping as the method of treatment. Options for disposal of treated water include discharge to the Little Spokane River (all systems), subsurface recharge (south and east systems), and discharge to Deep Creek (south system). Each of the extraction systems will include a comprehensive ground water monitoring program designed to evaluate system effectiveness. The extraction, treatment, discharge, and monitoring programs are described in detail in the Scope of Work. Additional related remedial action components, also specified in the Scope of Work, include:

- closure of the Colbert Landfill;
- o comprehensive ground water supply well monitoring program and alternate water supply plan; and
- o institutional controls on the future use of ground water in the area.

The remedial action will be implemented in phases. Phase I is designed to better characterize contaminant distribution and site geohydrology. Following completion of the Phase I investigation, design of the (Phase II) remedial action will be accomplished. The ROD provides for a performance-based design, allowing flexibility in the remedial approach. Specific performance criteria were presented in the ROD (Table 1 Performance Standards) and have been further refined in the Scope of Work (Tables IV-1 and V-1). The Scope of Work specifies the bases for design, the design criteria, and criteria for adjustment and modification of the remedial action if the design criteria are exceeded during operation. Thus, the Scope of Work specifies the bases for remedial action design.

Applicable and Relevant Standards

The EPA has evaluated the pump, treat, and discharge remedial approach and determined that it adequately protects human health and the environment and complies with applicable or relevant and appropriate public health or environmental requirements (ARARS). As specified in the ROD, the laws and regulations of concern include:

Resource Conservation and Recovery Act (RCRA, 42 USC 6901);
RCRA regulations (40 CFR 261 to 280); Washington State

Dangerous Waste Regulations (WAC 173-303); Minimum Functional Standards for Solid Waste Handling (WAC 173-304).

The selected remedy prevents further spread of ground water contamination and constitutes a Corrective Action program as specified in 40 CFR 264.100 and WAC 173-303-645(11). Closure of Colbert Landfill to State Minimum Functional Standards will be evaluated to ensure consistency with RCRA landfill closure standards.

o Safe Drinking Water Act (SDWA, 42 USC 300); Primary Drinking Water Standards (40 CFR 141).

The selected remedy prevents exposing the public to drinking water which exceeds the Maximum Concentrations Levels.

o Clean Water Act (CWA, 33 USC 1251); National Pollution Discharge Elimination System (NPDES, 40 CFR 122); NPDES Permit Program (WAC 173-220).

The selected remedy treats the extracted water before discharge to surface water. Other, mainly procedural, aspects of the NPDES Permit system will be met during the design phase. Although not actually required, it is the intent of Ecology to issue a permit.

o Rules and Regulations of the State Board of Health Regarding Public Water Systems (WAC 248-54).

Enhancements to the alternate water supply system, in order to supply all residences that may require these supplies, as specified in the Scope of Work will be in conformance with these regulations.

since the remedial action will implement a ROD selected remedy and a public comment period was required as part of the ROD process, the requirement for adequate notice and opportunity for public comment on the proposed remedy has been fulfilled.

DEVELOPMENT OF THE DESIGN PACKAGE

Consultant Selection

A consultant will be responsible for developing the remedial action pilot study and design for the project. Selection of the consultant will be based on the demonstrated competence and qualifications of prospective consultants to perform the required services at a fair and reasonable price. The process of consultant selection was initiated on February 8, 1988, when Spokane county advertised a Request for Professional Qualifications (RFQ). In response, nine firms submitted a Statement of Professional Qualifications (SOQ). The SOQ's were evaluated and a short-list of the five best qualified firms was identified based on the following criteria:

- o History of firm
- o Project considerations
- o Past experience on similar projects
- o Expertise of project team
- o Project management approach and philosophy
- o Community relations experience

The next step in the selection process will be to issue a Request for Proposal (RFP) to the short-listed firms, which will be accomplished following lodging of the Consent Decree. The criteria for final selection of the design consultant are still under development. However, appropriate criteria will be selected to ensure that the retained firm has the capability, knowledge, and understanding of the project required to successfully fulfill their obligations as design consultant.

A copy of the ROD, Draft Consent Decree, and Scope of Work will be provided to each short-listed firm for use during proposal preparation. Proposals will be evaluated and the most qualified firms will be ranked in order of qualification. process typically requires 60 to 90 days. As a "Local Agency", the County must meet Washington State Regulations for Contracts for Architectural and Engineering Services, as set forth in the Revised Code of Washington (RCW 39.80). A copy of these regulations is included in Appendix D. The consultant selection criteria will also meet federal procurement guidelines (40 CFR Part 33), in particular Section 33.525 (optional selection procedure for negotiation and award of subagreements for architectural and engineering services). Upon selection of the most highly qualified firm, the County will attempt to negotiate a design contract with that firm. If the County is unable to negotiate a fair and reasonable price with the most highly qualified firm, it will begin negotiations with the next qualified firm. Once a contract is negotiated and executed, implementation of the Scope of Work will begin.

Design Elements

Phase I, which is intended to better characterize contaminant distribution and site geohydrology for the Phase II interception system design, will be developed on the RI/FS and the ROD, as specified in the Scope of Work. Components of the Phase I design, as specified in the Scope of Work, for each project area include:

- o south System: Installation of a pilot ground water extraction and treatment system; installation of a ground water monitoring system to identify the location of the contaminant plume and assess the performance of the pilot system; assessment of treated water discharge management options; and definition of the Phase II South ground water interception and treatment system;
- o West System: Installation of a pilot ground water extraction and treatment system; installation of a ground water monitoring system to identify vertical and horizontal hydraulic gradients, determine the current location and distribution of the contaminant plume, and assess the performance of the pilot extraction system; assessment of treated water discharge management options; and definition of a Phase II West ground water interception and treatment system; and
- o East System: Installation of two pilot ground water extraction wells and a common treatment system; installation of a ground water monitoring system to improve definition of the location of the contaminant plume and assess the performance

of the pilot systems; assessment of treated water discharge management options; and definition of the Phase II - East ground water extraction and treatment system.

As specified in the Scope of Work, all work accomplished during Phase I will be performed in accordance with work plans subject to the review and approval of the EPA. The following Phase I work plans will be provided:

- O Health and Safety Plan;
- Quality Assurance Project Plan;
- O Phase I Pilot Well Plan;
- o Phase I Ground Water Monitoring Plan; and
- o Phase I Treatment and Discharge Plan.

Phase I progress reports will be submitted for EPA review, either monthly or at the completion of major project milestones. The activities accomplished during Phase I, conclusions resulting from these Phase I activities, and an assessment of the impact of these conclusions on the selected remedial action will be presented for EPA review in the Phase I Engineering Report.

Following completion of the Phase I investigation, design of the remedial action (Phase II) will be accomplished. In the Phase II design, the consultant will develop the final design for the extraction, treatment, discharge, and monitoring systems for the south, west, and east project areas.

preliminary remedial action design will be accomplished as part of the Phase II work plan preparation for the various remedial action components. Phase II Work Plans will include:

- Phase II Extraction Well Plan; 0
- Phase II Ground Water Monitoring Plan; and 0
- Phase II Treatment and Discharge Plan. 0

Peripherally related work plans that may be submitted at the same time as the Phase II work plans include:

- Landfill Closure Plan;
- Alternative Water Supply Plan; and 0
- plan for Institutional Controls. 0

The County understands that some work plan components may require more EPA review than others if significant design modifications are to be avoided. Consequently, some key components will be submitted for EPA review early on in the design process. Following Government review of the work plans, Phase II Plans and Specifications will be prepared and submitted for Government review at the 30, 60, and 90 percent completion stages to complete the remedial action design package.

<u>Schedule</u>

Spokane County intends to accomplish the design and construction of the remedial action in a timely manner. specified in Section XI of the Scope of Work, a schedule for submission of detailed work plans and additional documents will be submitted within two months from entry of the Consent Decree. The schedule will identify specifically when the Phase I work plans, Health and Safety Plan, Quality Assurance Project Plan, Phase I Engineering Report, and Phase I progress reports will be delivered. It will also describe the bases for establishing a plan, Plan for Institutional Controls, and Phase II Progress Reports. The EPA will be kept informed of project activities through the submittal of progress reports and, if necessary, through project meetings with appropriate County representatives.

A final schedule cannot be developed until certain legal aspects (such as entry of the Consent Decree) are completed and additional (Phase I) data are collected and analyzed. However, a preliminary (non-binding) schedule of major milestone events has been prepared for this document and is presented in the Cost Data section of this document in Table 3.

Sufficient data are not available to accurately estimate the length of time to complete the remedial action. Best estimates to date indicate that it could take thirty years or longer to meet the presently established performance criteria.

CONSTRUCTION OF THE REMEDY

The construction of the remedy (Phase II) will consist of three interrelated, and possibly overlapping, ground water extraction, treatment, and discharge systems (south, west, and east). The ground water extraction systems will each consist of several deep wells, serviced by submersible or turbine pumps and connected to the treatment system(s) by a tight-line header assembly. The treatment system(s) will consist of one or more air stripping units set on a concrete slab foundation, with appropriate utility connections for electricity and (possibly) natural gas. The need for stripping tower air abatement will be

assessed as specified in Section V.D of the Scope of Work. Treatment system effluent will be conveyed to the discharge point(s) by pipeline, with appropriate outfall structure(s) constructed to minimize erosion and promote dispersion. To the extent practicable, system components (wells, header assemblies, discharge lines, etc.) will be located below ground to minimize damage from freezing and vandalism, and to mitigate the impact of the remedial action on the local landscape.

These components will be constructed based on the Phase II plans and Specifications (see Section XI of the Scope of Work), which will be developed from the data generated during the Phase I investigation and pilot studies. Although some of the remedial components (such as the treatment system(s)) could be designed based on available information, the use of Phase I site characterization data and observations of pilot system performance should provide a more efficient, cost-effective design.

A construction quality assurance/quality control (QA/QC) plan will be developed by the design consultant and submitted before construction begins. Methods to assure material quality and proper construction techniques will be developed and incorporated into the construction QA/QC plan. The design consultant will provide construction management, construction inspection, design support, and shop drawing review services during construction. This will ensure adherence to the QA/QC plan. Appropriate performance bonds, as specified in the final bid documents, will be required.

The County intends to use contracting practices that will provide maximum open and free competition and that will not unduly restrict or eliminate competition. Contractor selection for construction of the (Phase II) remedial action will be accomplished in accordance with statutory procedures in awarding contracts (RCW 36.32.250), using standard Spokane County procurement procedures (these statutory requirements are presented in Contractor selection will also be conducted in Appendix D). accordance with federal procurement guidelines (40 CFR, part 33). The invitation for bids will include the selection criteria and will be advertised in the legally-designated newspaper for Spokane County, a locally-circulated newspaper, and a regionallycirculated newspaper. Contractor scope of work and recommended alternatives will be reviewed by the County's design consultant. Contractor bids will be reviewed and verified, and the construction awarded to the lowest responsive responsible bidder. Following completion of all the required legal documents and public notice, a contract will be signed between the County and the Contractor, and construction of the remedial action (Phase It is presently anticipated that the II) can be initiated. contract will be based on a fixed price rather than cost reimbursement.

Construction of the remedial action will be accomplished based on Phase II Work Plans and Phase II Plans and Specifications. A Phase II construction schedule will be developed in conjunction with the schedule for submittal of Phase II deliverables discussed in Section XI of the Scope of Work.

Phase II progress reports will be submitted to EPA for review. These progress reports will be submitted either periodically or at the completion of major Phase II construction milestones.

Following completion of construction, a Phase II Construction Documentation Report will be submitted to the EPA. This report will document Phase II construction activities, including any significant variations from, or modifications to, the Phase II Plans and Specifications or Work Plans.

Phase II construction oversight will be accomplished by the County's design consultant and/or other County representatives. To provide verification of compliance with Phase II Plans and Specifications, oversight will include field monitoring of construction and review of contractor-selected materials and construction methods. A construction manager will be designated by the County to be a focus for oversight activities and to ensure that the intent of the Phase II Plans and Specifications are being followed and the construction schedule is being achieved.

MANAGEMENT AND OPERATION OF THE PROJECT

During remediation, numerous activities involving various different kinds of skilled personnel will be undertaken at the same time. As a result of the complexity of this project, complete and effective project management is essential for proper execution. Thus, a well-defined management structure, as described below, will be established at the beginning of the project.

project management for the Colbert Landfill remediation will be administered by the County, although many of the technically related management tasks will be accomplished by the design consultant. The County has managed a number of large projects, including a \$120,000,000 waste to energy incinerator (presently under design) and \$40,000,000 of sewer line construction projects. Thus, the County has a demonstrated knowledge and capability to manage projects of this size.

Spokane County will designate a County employee as Project Coordinator. The Project Coordinator will have overall responsibility for project supervision throughout remediation. The Project Coordinator will be a professional engineer with qualifications necessary for satisfactory performance of the job, including experience in managing large construction projects.

The Project Coordinator's responsibilities will include assessment of overall project progress and coordination; interaction with the EPA project manager, other federal and state regulatory agencies, other interested parties, and local citizen groups on behalf of the County; and the undertaking of any community relation activities that the County agrees to perform at the request of the United States and the State of Washington. The Project Coordinator will be responsible for budget review and direct coordination with the design consultant.

The Project Coordinator will also oversee the activity of several entities responsible for the individual segments of the remedial program, although it is anticipated that a single design consultant firm will be retained to provide management and engineering expertise for the following tasks:

- o Phase I Investigation and Pilot Studies;
- o Preparation of Work Plans and other Deliverables (see Scope of Work, Section XI); and
- o Consulting/Design Services
 - design of extraction, treatment, and discharge systems,
 - monitoring evaluation,
 - construction oversight,
 - facilities start-up,
 - facilities operations and maintenance plans.

A single point of contact will be established within the design consultant firm to facilitate communications with the Project Coordinator. Individual Task Managers will be assigned to handle internal communications and provide technical oversight and quality control.

Contractors will be retained to implement Phase II of the Remedial Action. It may also be necessary to retain contractors for construction of some of the Phase I components and to provide occasional O&M services for the extraction, treatment, and discharge system. However, the County plans on using their own personnel to operate the facilities based on the facilities operations and maintenance plans to be developed by the design consultant.

Because this project is anticipated to generate a large volume of data, a computerized data management system will be established to effectively store and retrieve the necessary information. Data will be provided from all onsite task func-

tions to this system, and the system will be available for all tasks.

The management system will provide cost-effective project direction by minimizing the number of decision makers and streamlining communications. It will assure that the Project coordinator is able to provide adequate project oversight and serve as a focus for remedial activities, while allowing the design consultant to implement the remedial action in a timely and cost-effective manner.

EPA oversight is to be provided by the designated EPA project manager. The EPA project manager will be kept informed of relevant site activities by the County, or their designated representative. The EPA project manager can use this information to determine the appropriate level of EPA oversight required for various site activities.

COST DATA

Because it is ultimately responsible for between 30 to 50 percent of the total estimated costs, Spokane County has a strong incentive to conduct the remedy at this site in a cost-effective and efficient manner. Thus, the County intends to monitor closely the progress of remediation and the costs incurred.

A total project cost of about \$9.4 million (present worth) was estimated in the FS. However, the County and the EPA consider a cost for remedial action of about \$14 million more reasonable than the \$9.4 million estimate contained in the FS. This upward adjustment in cost from \$9.4 million to about \$14 million is based on the following:

| 0 | FS estimate | | \$9.4 million | 7 |
|---|-----------------|-------|----------------|---|
| 0 | Past costs | | \$1.7 million | - |
| 0 | Phase I | | \$2.0 million | |
| 0 | 10% Contingency | | \$1.1 million | |
| | | Total | \$14.2 million | |

Table 3 presents the proposed construction sequence and summary cost estimates for the remedial action. Initiation of remedial activities (first year) is assumed to start once the Consent Decree has been entered with the court. The timing of remedial activities presented in this table should be considered preliminary and is intended solely for the purposes of this request for preauthorization. As specified in Section XI of the Scope of Work, a schedule for work plans and other deliverables (which will be based upon a schedule for completion of project tasks) will be submitted within two months of entry of the Consent Decree by the County. However, since this schedule is subject to EPA approval, the EPA has sufficient assurance that the project will be accomplished in a timely manner.

The County's proposed procurement practices were described in the Construction of the Remedy section of this document. These practices will ensure cost-effective choice of general contractors. Proper oversight and management of the project will also ensure efficient remediation.

ASSURANCE OF STATE COOPERATION AND O/M ARRANGEMENTS

The State of Washington will be a party to the Consent Decree in this matter (which includes the Scope of Work). Addi-

TABLE 3

PROPOSED WORK SEQUENCE, INCLUDING COST ESTIMATES:

| Description of Work | Cost |
|--|--------------|
| 1st Year | \$2,000,000 |
| Data review/design Phase I Construction of pilot systems (Phase I) Additional monitoring wells Air monitoring Alternate water supply | |
| 2nd Year | \$1,600,000 |
| Air monitoring Phase I evaluation and report Start Phase II design | |
| 3rd Year | \$5,600,000 |
| Design Phase II Start Phase II construction Begin start-up Additional monitoring wells | |
| 4th Year | \$3,000,000* |
| Complete Phase II construction Continue start-up and verification Additional monitoring wells Begin operation and maintenance | |
| 5th Year | \$ 200,000 |
| Complete start-up and verification Operation and maintenance Periodic evaluation and reports | |
| ALL FOLLOWING YEARS (total cost, present worth) | \$2,000,000 |
| * Includes payment for RI/FS. | \$ 14.0 M |

tionally, the State will assist the County in funding the remedial action through grant monies and State mixed funding. The State of Washington maintains that such participation constitutes agreement as to the appropriateness of the remedy and assurance of State cooperation.

The County plans on providing for long-term operation and maintenance of the site. A remedial action fund is to be established to provide operating capital for the design, construction, operation, and maintenance of the remedial action. Contributions to the fund are to be made by the PRPs on a schedule of annual payments designed to ensure sufficient monies are available when needed. The proposed schedule for payment is provided for in Section VIII, the Obligations of Consenting Parties, within the Consent Decree (Appendix B).

SCHEDULE FOR AND DOCUMENTATION OF CLAIMS AGAINST THE FUND

As a part of developing cost estimates for the remedy at this site, the County and its consultant have analyzed how the costs would be incurred over time. The goal of this analysis was to ensure that the remedial action trust will, at all times, have sufficient funds for the work to proceed without interruption. Accordingly, the PRPs (the County and Key Tronic) have proposed a schedule of payments in accordance with the Consent Decree. In addition, the County proposes that reimbursement from the Fund be scheduled. The schedule for reimbursement calls for payments from the Fund at those points during the work at which several Tasks will have been completed and at completion of

system start-up. The schedule is set out in more detail in Table 4.

Although the present cost estimate of \$14 million represents the best estimate based on available data, EPA and the County recognize that costs may increase due to the uncertainties regarding subsurface conditions. Because of these uncertainties, the parties have agreed that if it becomes necessary to modify the scope of the actions that EPA authorizes pursuant to this request, the County may submit a revised application for preauthorization to reflect these modifications. Any such modifications will be structured to reflect an EPA mixed funding contribution totaling 10 percent of the design, construction, and startup costs.

WORKER TRAINING, HEALTH AND SAFETY

As specified in Section XI of the Scope of Work, a Health and Safety Project Work Plan will be developed for this site. This health and safety plan will be developed by the design consultant to protect individuals from the hazards that might be encountered during remedial action activities at the site. It will be developed based on the toxicological properties of the contaminants present at the site, as well as consideration of relevant government regulations and guidances, including "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities" (U.S. Department of Health and Human Services 1985), and EPA's "Standard Operating Safety Guides" (Nov. 1984 FOAG). The Health and Safety Plan, as with the other work plans discussed in Section XI of the Scope of Work, requires the

TABLE 4

SCHEDULE OF EPA PAYMENTS FOR THE COLBERT LANDFILL REMEDIATION

| Payment No. | Amount | Schedule* |
|-------------|--------------------|--|
| 1 | \$250,000 | Completion of Phase I, including submittal of the Phase I Engineering Report (within about 2 years of entry of the Consent Decree) |
| 2 | \$670,000 | Completion of construction of one or more of the (south, east, or west) Phase II systems (within about 3 years of entry of the Consent Decree) |
| 3 | \$480,000 1.4 M | Completion of Startup for the three Phase II systems (within about 4 years of entry of the Consent Decree) |

^{*} Specific tasks are more thoroughly described in Table 2 of this document. Payments are to be made following completion of tasks, with documentation by appropriate major milestone reports.

approval of the EPA prior to implementation. Work will not be initiated at the site (Phase I or Phase II) until an EPA-approved health and safety plan has been implemented.

COMMUNITY RELATIONS

The County recognizes that the community should be kept informed during remediation and that community concerns should be considered to the extent practicable. Although the County intends to maintain an active role, Section XXIX of the Consent Decree specifies that the Government Plaintiffs (EPA and Ecology) will be the lead for community relations, while the County will be responsible for helping to coordinate and implement community relations for the site.

The County will (at a minimum) assist in:

- o distribution of fact sheets;
- o coordination of public meetings;
- o provide appropriate County representatives for public meetings and presentations; and
- o supply of appropriate documents and information for information repositories.

The County is ready and willing to implement any part of the Community Relations Plan which EPA and Ecology deem "appropriate." The County will cooperate with and support the Governments' community relations effort, and will provide any information needed. Additionally, the County will undertake other community relations activities on request from the EPA and Ecology.

MONITORING AND DOCUMENTATION

spokane County recognizes that, pursuant to Section 300.69 of the NCP, documentation must be maintained for all phases of response action at this site. The remedial action has not progressed to the point where a detailed documentation plan has been developed. However, appropriate documentation of remedial activity will be accomplished through the submittal of work plans and other deliverables, as specified in Section XI of the Scope of Work. Specifically, documentation will include:

- O Health and Safety Plan,
- o Quality Assurance Project Plan,
- o Phase I Pilot Well Plan,
- o Phase I Ground Water Monitoring Plan,
- o Phase I Treatment and Discharge Plan,
- o Phase II Extraction Well Plan,
- o Phase II Ground Water Monitoring Plan,
- o Phase II Treatment and Discharge Plan,
- o Landfill Closure Plan,
- o Alternative Water Supply Plan,
- o Plan for Institutional Controls,
- o Phase I Engineering Report,
- o Phase II Plans and Specifications,
- o Phase II Construction Documentation Report; and
- o Phase I and Phase II Progress Reports.

The Quality Assurance Project Plan and the various work plans will provide documentation of procedures and practices, construction methodology, and material requirements to be

followed during accomplishment of all aspects of the remedial action. Phase II Plans and Specifications will document the final remedial design; while the Phase II Construction Documentation Report will document the as-built status of the remedial action following completion of construction.

Progress reports will be issued by the County or their design consultant periodically throughout the remedial action. As specified in the Consent Decree, progress reports will be submitted monthly during periods of construction and quarterly thereafter.

The County will maintain all records -- including sampling and QA/QC reports -- generated as a part of the remedial efforts for a minimum of ten years following termination of the Consent Decree.

CONCLUSIONS

The information presented in this Request for Preauthorization has been prepared to meet the prior notification and prior approval requirements of Section 300.25(d) of the NCP for EPA mixed funding. Due to the present status of the remedial action, some of the informational requests outlined within the EPA Preauthorization Guidance Document (EPA 1988) could not be addressed in detail. However, the attached Scope of Work documents the EPA's review and approval authority for specific aspects of the remedial action for which detailed information is not presently available.

EPA mixed funding is an integral part of the Consent Decree negotiated between the EPA and Spokane County. Final agreement and lodging of the Consent Decree cannot be accomplished until this Request for Preauthorization has been reviewed and approved.

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- Spokane County and Key Tronic Corporation. Results of Continued Studies at Colbert Landfill, Colbert, Washington, by George Maddox and Associates. Personal Communications with Bruce Austin (Spokane County and Key Tronic, Incorporated), Spokane, Washington.
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- USEPA, <u>Guidance on Requests for Preauthorization by Potentially</u>
 Responsible Parties, January 24, 1988.
- U.S. Department of Health and Human Services, National Institute of Occupational Safety and Health. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities. DHHS (NIOSH) Pub. No. 85-115. October 1985.

Re: Colbert Landfill Ref: CERCLA 88-004

DECISION DOCUMENT

PREAUTHORIZATION OF A CERCLA \$111(a) CLAIM

Colbert Landfill Site - Spokane County, Washington

STATEMENT OF AUTHORITY

Section 111 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. §§ 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes the reimbursement of response costs incurred in carrying out the National Contingency Plan (NCP). Section 112 of CERCLA directs the President to establish the forms and procedures for filing claims against the Hazardous Substances Superfund (the Superfund or the Fund). Executive Order 12580 delegates to the Environmental Protection Agency (EPA) the responsibility for such claims. Executive Order 12580 delegates to EPA the authority to reach settlements pursuant to section 122(b) of CERCLA. The Director of the Office of Emergency and Remedial Response (OERR) is delegated authority to evaluate and make determinations regarding claims (EPA Delegation 14-9, September 13, 1987 and EPA Redelegation 14-9 "Claims Asserted Against the Fund, May 25, 1988).

BACKGROUND ON THE SITE

On September 29, 1987, Robie G. Russell, EPA Regional Administrator for Region X, signed the Record of Decision (ROD) for the Colbert Landfill site (hereinafter referred to as the "Site") (Attachment 1). The ROD selected an interim final remedial action for the site that addresses management of migration of contamination using a groundwater interception system and attempts source control through extraction in areas of highest contaminant concentrations. The remedy is considered to be interim final because the extraction and interception well system will be in operation for decades before remediation is complete and changes in the selected remedial action may be required during that period. In summary, the remedy provides for an alternative drinking water supply, installation of additional monitoring wells to define the plume(s), preliminary selection of the types of treatment systems for each geographic portion of the site, treatability studies for each treatment method, preliminary and final designs, installation of the wells and construction of the treatment system and discharge structure, operation of the systems, monitoring and testing, and development and implementation of institutional controls.

In May 1987, EPA provided members of the public, including the group of potentially responsible parties ("PRPs"), with an opportunity to comment on the remedial investigation and feasibility study (RI/FS) of the Site and in the selection of the preferred

alternative for cleanup. On January 8, 1988, EPA, pursuant to section 122 of CERCLA, issued special notice letters to three PRPs and notice letters to nine others. In May 1988, EPA and representatives for Spokane County, Key Tronics, Inc., and the U.S. Air Force reached agreement in principle. The agreement provided that two of the PRPs would pay a portion of the cost into a trust fund and that Spokane County would carry out the remedy selected by EPA, and that EPA would reimburse Spokane County for a portion of the costs of implementing the remedy.

On September 12, 1988, Spokane County submitted a formal request for preauthorization as required by section 300.25(d) of the National Contingency Plan (NCP) (40 CFR Part 300).

A consent decree between EPA and Spokane County and Key Tronics is being executed simultaneously with this Decision Document. The Scope of Work, which is appended to the Consent Decree, will be used to implement the remedy selected in the ROD and summarized above.

FINDINGS

Preauthorization (i.e., EPA's prior approval to submit a claim against the Superfund for reasonable and necessary response costs incurred as a result of carrying out the NCP) represents the Agency's commitment that if the response action is conducted in accordance with the preauthorization and costs are reasonable and necessary, reimbursement, subject to any maximum amount of money set forth in the preauthorization decision document, will be had from the Superfund. Preauthorization is a discretionary action by the Agency taken on the basis of certain determinations.

EPA has determined based on its evaluation of relevant documents and Spokane County's request for preauthorization, pursuant to section 300.25(d) of the NCP, that:

- (1) A release or potential release of hazardous substances warranting a response under section 300.68 of the NCP exists at the Colbert Landfill site
- (2) Spokane County has agreed to implement the cost-effective remedy selected by EPA to address the threat posed by the release at the Site;
- (3) Spokane County has demonstrated engineering expertise and a knowledge of the NCP and attendant guidance;
- (4) The activities proposed by Spokane County, when supplemented by the terms and conditions contained herein, are consistent with the NCP; and
- (5) Spokane County has demonstrated evidence of State cooperation.

In summary, while EPA does not accept as fact all of the statements contained in Spokane County's preauthorization request, the preauthorization request demonstrates a knowledge of relevant NCP provisions and EPA guidance for the conduct of a remedial action. The Consent Decree, the terms and conditions of this preauthorization and, in technical matters, the Scope of Work shall govern the conduct of response activities. In the event of any ambiguity or inconsistency between the Request for Preauthorization and this Preauthorization Decision Document with regard to claims against the Fund, the Preauthorization Decision Document and the Consent Decree shall govern. As stated above, in technical matters, the Scope of Work and the Work Plan, when developed by Spokane County and approved by EPA, shall govern the conduct of response activities.

DECISION AND TERMS AND CONDITIONS

I preauthorize Spokane County to submit a claim(s) against the Superfund for an amount not to exceed the lesser of one million four hundred thousand dollars (\$1,400,000), or eleven and one half percent (11.5%) of reasonable and necessary eligible costs, unless such amount is adjusted by EPA pursuant to paragraph 13 below, incurred for remedial design and remedial construction in connection with the remedy set forth in EPA's Record of Decision for the Colbert Landfill site (Exhibit 1 hereto) as specified in the Scope of Work (which is an attachment to the Consent Decree) and the Work Plan when approved by EPA, subject to the terms and conditions set forth below. In the event of any ambiguity or inconsistency between the terms and conditions and the discussion, the terms and conditions shall govern.

1) Spokane County, as provide in the Scope of Work attached to the Consent Decree, shall develop and implement a worker health and safety plan which complies with OSHA Safety and Health Standards: Hazardous Waste Operations and Emergency Response (29 CFR Part 1910.120; 51 Federal Register 45654 et seq., December 19, 1986.

Discussion:

Spokane County's request for preauthorization fully addresses plans for worker health and safety. As a term and condition of preauthorization, Spokane County shall develop a worker health and safety plan which will be reviewed by EPA. The health and safety plan when approved by EPA shall satisfy the requirements of OSHA Safety and Health Standards: Hazardous Waste Operations and Emergency Response (29 CFR Part 1910.120, 51 Federal Register 45654 et seq. (December 19, 1986). Spokane County will implement the plan as approved or subsequently revised.

2) Pursuant to Section VII of the Consent Decree, the Scope of Work requires that Spokane County submit plans (i.e., Work Plan) for approval. The Work Plan shall including a plan tor air monitoring during air stripping.

- 3) Spokane County shall develop a remedial design in accordance with the Scope of Work and EPA's Remedial Design and Remedial Action Guidance. The remedial design to be developed by Spokane County as specified in the Scope of Work shall insure that all actions undertaken by Spokane County shall be under taken in accordance with the the requirements of all applicable State and Federal laws and regulations and all "applicable" or "relevant and appropriate" Federal and State environmental requirements as identified pursuant to the ROD and pursuant to § 121 of CERCLA. In accordance with Section XXI of the Consent Decree, all activities undertaken by Spokane County off-site shall in addition comply with all required permits, unless an exemption from the requirements of such permits is granted according to law.
- 4) Modification of remedial design elements or performance requirements contained in the remedial design report shall require approval by the Regional Administrator or his/her designee.
- 5) Spokane County shall provide for long-term site management (i.e., operation and maintenance) of the Site sufficient to ensure continuing protection of human health and the environment. The costs of operation and maintenance are not eligible for reimbursement. The Work Plan when developed and approved will differentiate between operation and maintenance activities and pump and treatment activities.
- 6) Spokane County shall develop and implement for remedial design and remedial action:
 - a) Procedures which provide adequate public notice of solicitations for offers or bids on contracts. Solicitations must include the evaluation methods and the criteria for contractor selection. EPA shall have the right to disapprove the selection of the architect or engineer and the construction firm(s) selected by the County.
 - b) Procedures for procurement transactions which provide maximum open and free competition; do not unduly restrict or eliminate competition; and provide for the award of contracts to the lowest, responsive, responsible bidder, where the selection can be made principally on the basis of price. Spokane County and its contractors shall use free and open competition for supplies, services and construction.
 - c) Contracts for construction which include a Differing Site Conditions clause equivalent to that found at 40 CFR §33.1030(4).

- d) Procedures to settle and satisfactorily resolve, in accordance with sound business judgment and good administrative practice, all contractual and administrative issues arising out of preauthorized actions. Spokane County shall issue invitations for bids or requests for proposals; select contractors; approve subcontractors; manage contracts in a manner to minimize change orders and contractor claims; resolve protests, claims, and other procurement related disputes; and handle subcontracts to assure that work is performed in accordance with terms, conditions and specifications of contracts.
- e) A change order management policy and procedure in accordance with EPA's guidance on State Procurement Under Remedial Cooperative Agreements (OSWER Directive 9375.1-11, June 1988).
- f) Detailed quality assurance/quality control plans for remedial design activities (e.g., sampling, monitoring, etc.) and construction activities (e.g., sampling, operations, etc.).
- g) A financial management system that consistently applies generally accepted accounting principles and practices and includes an accurate, current and complete accounting or all financial transactions for the project, complete with supporting documents, and a systematic method to resolve audit findings and recommendations.
- 7) EPA shall have the right to disapprove the project manager selected by Spokane County. Spokane County shall submit to EPA a justification to perform project management in-house or contract it out. The justification shall take into account cost, time, and reliability of in-house versus contracted project management.

Discussion:

Spokane County's request for preauthorization did not contain a justification for its proposal to utilize an in-house project manager as requested in EPA's Preauthorization Guidance (Reasonable Cost, page 7).

8) Spokane County shall advise EPA prior to the issuance of a solicitation for construction of the remedy using other than a fixed price contract.

Discussion:

Spokane County's request for preauthorization stated that it anticipates that the contract for construction of Phase II will be based on a fixed price rather than cost reimbursement. EPA's Preauthorization Guidance

(Reasonable Cost, page 7) requests an explanation if the applicant proposes to use other than the formal advertising/sealed bidding procurement method which results in a fixed price contract awarded to the lowest responsive, responsible bidder for construction. Therefore, as a term and condition of preauthorization, Spokane County shall notify EPA prior to issuing a solicitation for construction of Phase II using a negotiated procurement.

- 9) Spokane County shall provide EPA and its agents with site access as set forth in Section XXII of the Consent Decree and shall immediately notify the Agency if they are unable to initiate or complete the preauthorized response action.
- 10) In submitting claims to the Superfund, Spokane County shall:
 - a) Document that response activities were preauthorized by EPA;
 - b) Substantiate all claimed costs through a financial management system as described in paragraph 6(g); and
 - c) Document that all claimed costs were eligible for reimbursement pursuant to this preauthorization and are reasonable and necessary in accordance with the appropriate Federal cost principles.

Discussion:

See paragraph 15 for additional references to the Federal cost principles.

- 11) Spokane County shall maintain all cost documentation and any records relating to its claim for a period of not less than six years from the date on which the final claim has been submitted to the Superfund, and shall provide EPA with access to their records. At the end of the six-year period, Spokane County shall notify EPA of the location of all records. Spokane County shall allow EPA the opportunity to take possession of the records before they are destroyed; this requirement is in addition to the record retention requirement located at Section XIII of the Consent Decree.
- 12) Claims may be submitted against the Superfund only while the Spokane County is in compliance with the terms of the Consent Decree and no more frequently than intervals of:
 - (a) completion of Phase II Design (approximately 3 years);
 - (b) completion of Construction (approximately 4 years); and
 - (c) completion of Startup and Verification (approximately 5 years);

- 13) If the Spokane County finds it necessary to seek to modify the actions that EPA preauthorized, Spokane County may may submit to EPA a revised application for preauthorization. In addition, Spokane County may submit a revised application for preauthorization upon EPA's determination of the requirements for final closure of the Site. EPA will consider such an application for preauthorization in a timely manner and will subject to the availability of appropriated funds amend the maximum dollar amount for which Spokane County may submit claims to the Fund. The maximum amount for which Spokane County may submit claims will be determined according to the criteria used in approving the County's application for preauthorization and shall equal 11.5% of reasonable and necessary eligible costs to implement the the approved remedy.
- 14) Claims shall be submitted to the Director, Office of Emergency and Remedial Response, EPA, Washington, D.C. EPA shall provide the appropriate form(s) for such claims.
- of private insurance and claims adjusting organizations or federal personnel. In making a determinati whether costs are allowable, the claims adjuster will rely upon the appropriate Federal cost principles (non-profit organizations OMB Circular A-122; profit making organizations 48 CFR Subparts 31.1 and 31.2). Where additional costs are incurred due to acts or omissions by the County, payment of the claim will be adjusted accordingly. EPA may require Spokane County to submit any additional information needed to determine whether the actions taken were reasonable and necessary.
- 16) At least 60 days before filing a claim against the Fund for the remedial action, Spokane County shall present in writing all claims to any person known to Spokane County who may be liable under section 107 of CERCLA for response costs incurred in carrying out the Consent Decree. If the first claim was denied by the responsible party or not responded to, and EPA agrees that there is no reason to believe that subsequent claims would be honored by such responsible party, the denial of the first claim, or lack of response, shall be considered denial of every subsequent claim.
- 17) Payment of any claim shall be subject to Spokane County subrogating to the United States its rights as claimant to the extent to which its response costs are compensated from the Superfund. Further, Spokane County shall cooperate with any cost recovery action which may be initiated by the United States. The Spokane County and Spokane County's contractors shall furnish the personnel, services, documents, and materials needed to assist EPA in the collection of evidence to document work performed and costs expended by Spokane County or the

County's contractors at the Site in order to aid in cost recovery efforts. Assistance shall also include providing all requested assistance in the interpretation of evidence and costs and providing requested testimony. All of Spokane County's contracts for implementing the remedy shall include a specific requirement that the contractors agree to provide this cost recovery assistance.

- 18) Eligible costs are those costs incurred, consistent with the NCP, in carrying out the remedial action, subject to the following limitations:
 - a) Costs may be reimbursed only if incurred after the date of this preauthorization;
 - b) Costs may be reimbursed only for design and construction of the remedy at the Site as provided herein. Such costs shall not include any of the oversight costs incurred by EPA or the Department of Ecology for the State of Washington, investigatory costs, or past response costs that were incurred by EPA or the State of Washington prior to the effective date of the Consent Decree.
 - c) Costs incurred for long-term operation and maintenance, as described in paragraph 5, are not eligible for reimbursement from the Superfund.
 - d) Costs incurred for the payment of a person who is listed in the List of Parties Excluded From Federal Procurement or Non-Procurement, established pursuant to Executive Order 12549, May 26, 1988, at the time the contract is awarded shall not be eligible for reimbursement unless Spokane County obtains approval from EPA pursuant to 40 CFR Part 32 prior to incurring the obligation.
 - e) Costs incurred for the payment of contractor claims either through settlement of such claims or an award by a third party may be reimbursed from the Fund to the extent EPA determines that:
 - (i) the contractor claim arose from work within the scope of the contract at issue and the contract was for activities which were preauthorized;
 - (ii) the contractor claim is meritorious;
 - (iii) the contractor claim was not caused by the mismanagement of Spokane County;
 - (iv) the contractor claim was not caused by Spokane County's vicarious liability for the improper actions of others;

- (v) the claimed amount is reasonable and necessary;
- (vi) the claim for such costs is filed by Spokane County within 5 years of completion of the preauthorized activities; and
- (vii) payment of such a claim will not result in total payments from the Fund in excess of the amount preauthorized.

Discussion:

"Contractor claim" means the disputed portion of a written demand or written assertion by any contractor who has contracted with Spokane County pursuant to the Consent Decree to perform the remedial action, seeking as a matter of right, the payment of money, adjustment, or interpretation of contract terms, or other relief, arising under or related to a contract, which has been finally rejected or not acted upon by Spokane County and which is subsequently settled by Spokane County or an award by a Third Party through the Disputes Clause of the contract document.

- f) An award by a third party on a contractor claim should include:
 - (i) findings of fact;
 - (ii) conclusions of law;
 - (iii) allocation of responsibility for each issue;
 - (iv) basis for the amount of award; and
 - (v) the rationale for the decision.
- g) Interest accrues on amounts due Spokane County pursuant to this agreement where EPA fails to pay the amount within sixty (60) days of EPA's receipt of a completed claim from Spokane County. A completed claim is a demand for a sum certain which includes all documentation required to substantiate the appropriateness of the amounts claimed. Where Spokane County submits a claim which is technically complete but for which EPA requires additional information in order to evaluate the amount claimed, interest will not accrue on the claim until sixty (60) days after EPA's receipt of the requested additional information. The rate of interest paid on a claim is the rate of interest on investments of the Superfund established by subchapter A of chapter 98 of the Internal Revenue Code of 1954.

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- h) For a period not to exceed 5 years from completion of startup and verification, costs incurred for restoration of ground water shall be eligible for recovery until EPA determines that the ground water contaminant levels have been reduced to the levels as prescribed in the ROD.
- 19) If any material statement or representation made in the application for preauthorization is false, misleading, misrepresented, or misstated and EPA relied upon such statement in making its decision, the preauthorization by EPA may be withdrawn following written notice to Spokane County. Disputes arising out of EPA's determination to withdraw its preauthorization shall be governed by Section XXVII of the Consent Decree. Criminal and other penalties may apply (see Exhibit 3).
- 20) The Superfund is not hereby obligated to reimburse Spokane County for subsequent remedial actions not covered by this preauthorization caused by failure of the original remedy if those actions are necessary as a result of the failure of Spokane County, their employees or agents, or any third party having a contractual relationship with Spokane County to properly perform activities under the Work Plan and any modification thereto approved by EPA and in conformance with the terms and conditions of this preauthorization decision document. The foregoing shall not apply if the remedy fails for any other reason. EPA may require Spokane County to submit any additional information needed to determine whether the actions taken were in conformance with the Work Plan and were reasonable and necessary.
- 21) This preauthorization shall be effective as of the date of entry of the Consent Decree by the Court.

Director, Office of

Emergency and Remedial Response

EXHIBITS

- 1. EPA Record of Decision for the Colbert Landfill Site
- 2. Consent Decree
- 3. Civil and Criminal Penalties

EXHIBIT 3

CERCLA PENALTY FOR PRESENTING FRAUDULENT CLAIM

Any person who knowingly gives or causes to be given false information as a part of a claim against the Hazardous Substance Superfund may, upon conviction, be fined in accordance with the applicable provisions of title 18 of the United States Code or imprisoned for not more than 3 years (or not more than 5 years in the case of a second or subsequent conviction), or both.

(42 USC 9612 (b)(1).)

CIVIL PENALTY FOR PRESENTING FRAUDULENT CLAIM

The claimant is liable to the United States for a civil penalty of \$2,000, and an amount equal to two times the amount of damages sustained by the Government because of the acts of that person, and costs of the civil action. (31 USC 3729 and 3730.)

CRIMINAL PENALTY FOR PRESENTING FRAUDULENT CLAIM OR MAKING FALSE STATEMENTS

The claimant will be charged a maximum fine of not more than \$10,000 or be imprisoned for a maximum of 5 years, or both. (See 62 Stat. 698, 749; 18 USC 287, 1001.)